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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/766,577	01/23/2001	Norio Nagai	0905-0254P-SP	2339

2292 7590 07/26/2006

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EXAMINER

MISLEH, JUSTIN P

ART UNIT	PAPER NUMBER
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2622

DATE MAILED: 07/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/766,577	NAGAI, NORIO	
	Examiner	Art Unit	
	Justin P. Misleh	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2, and 4 - 10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, and 4 - 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed May 16, 2006 have been fully considered but they are not persuasive.
2. Applicant argues, "even assuming Kowno, Okamura, and Miyawaki can be combined ... one with ordinary skill in the art ... would not conceive 'a light-emission control unit for controlling a strobe light-emission device in such a manner that the strobe light-emission device illuminates precisely a position of a subject that corresponds to a center point of the designated electronic zoom area, the center point of the designated electronic zoom area being different from a center point of the image of the subject represented by the image data output from said image sensing device,' as required by claim 1."
3. The Examiner respectfully disagrees with Applicant's position regarding Kowno et al. Kowno et al., which the Examiner relied upon to teach the electronic zoom features of the claim language, clearly discloses where the center point of the designated electronic zoom area being different from a center point of the image of the subject represented by the image data output from said image sensing device (see the distinction between the original image with electronic zoom center point a in figure 8 and the electronically zoomed image in figure 9 also with center point a). In addition to figure 8 showing two distinct center points being different from each other, Kowno et al. state (in paragraph 0162), "the image is enlarged at a magnification proportional to the distance of the dragging such that the dragging starting point "a" is displayed at the center of the LCD 6 as shown in FIG. 9."

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4. Moreover, the Examiner also respectfully disagrees with Applicant's position regarding Okamura. Okamura discloses two embodiments, wherein in a first embodiment (shown in figures 1 and 2) both the guide number and the illumination angle of the flash (110) are made to correspond to the zooming performed by the lenses (101 and 102) and in a second embodiment (shown in figures 3 and 4) only the illumination angle of the flash (110) is changed with the respect to the zooming. Okamura supports the Examiner's assertion in column 2 (lines 24 – 29) by stating, "While the image pickup apparatus according to each of the embodiments uses the flash device of the kind arranged to vary the amount of light emission by varying the illuminating angle, the invention applies also to a case where the image pickup apparatus uses a flash device of the kind arranged to vary both the illuminating angle and the amount of light emission separately from each other." Furthermore, the Okamura indicates a main purpose of the invention is to overcome the problems with the prior art that result in inadequate amount of exposure when capturing an image. Specifically, in column 1 (lines 22 – 34), Okamura indicates that simply controlling the guide number to vary in accordance with the magnification is not enough obtain proper exposure; and, hence, to correct this problem Okamura varies both the guide number and the illumination angle according the magnification (see column 1, lines 43 – 54). Thus, it clear the Okamura discloses a light-emission control unit for controlling a strobe light-emission device in a such a manner that the strobe light-emission device illuminates precisely a position of a subject that corresponds to a center point of a designated zoom area.

5. With Kowno et al. teaching of a different center points (as stated above) and Okamura's teaching of a illuminating a zoom area (as stated above), the combination would absolutely yield "a light-emission control unit for controlling a strobe light-emission device in such a manner that

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the strobe light-emission device illuminates precisely a position of a subject that corresponds to a center point of the designated electronic zoom area, the center point of the designated electronic zoom area being different from a center point of the image of the subject represented by the image data output from said image sensing device,” as claimed. Also, as indicated in the Non-Final Office Action (mailed Feb. 21, 2006; page 7), in this response (see paragraph 4 above), and in Okamura (the secondary reference; column 1, lines 20 – 22), the advantage of combining the features of Okamura with Kowno et al. is “taking a shot of an object with an adequate amount of exposure.”

6. Finally, the Examiner on Miyawaki to teach the recording both the original image and image data representing the electronic zoom image; there is no reliance upon to Miyawaki to teach anything about the claimed light-emission control unit.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 1, 2, and 4 – 8** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kowno et al. in view of Okamura in further view of Miyawaki et al.

The above *Response* is fully incorporated into these rejections.

Summary of Kowno et al.

Kowno et al. disclose, as stated in paragraphs 42, 56, 78, 81, 99, 157, 159, 162, 163, 170, 176, 184, and 185, an image sensing apparatus (1 – figures 1 – 4) comprising optical zooming (via the lens system 3 – figures 1 – 4) and electronic zooming (via CPU 39 – figure 4) wherein the zooming is actuated via a standard telephoto/wide angle switch (15 – figure 1) or via a user designation (see figures 8 – 11) on an display screen (via LCD 6 – figures 2 and 4). Kowno et al. also disclose that during image composition, when a preview image is displayed on the display screen (6), a user may operate the switch (15) or may designate, using the touch tablet (6A – figures 2 and 4), an area (via “a”, “b”, and “X” – figure 8) on the display screen (6) to perform zooming on the preview image (see transition from figures 8 → 9). According to Kowno et al., the zooming maybe strictly optical zooming by adjusting the focal length of a lens system (3 – paragraph 157), maybe strictly digital zooming by enlarging through interpolation (paragraph 157), or maybe a combination of optical zooming and digital zooming (paragraph 181). Lastly, Kowno et al. disclose a strobe/flash (4) for illuminating a scene, as necessary, during image composition (paragraph 42, 78, and 99).

9. For **Claims 1, 2, and 8**, Kowno et al. disclose an image sensing apparatus (1) and a method of operating thereof comprising:

an image sensing device (CCD 20) for sensing the image of a subject and outputting image data representing the image of the subject;

a display control unit (CPU 39) for controlling a display unit (LCD 6) in such a manner that the image of the subject represented by the image data output from said image sensing device (CCD 20) will be displayed on a display screen (LCD 6);

a designating unit (Touch Tablet 6A) for designating an electronic zoom area (figures 8 and 9) in the image of the subject displayed on the display screen (LCD 6);

an electronic zoom device that electronically magnifies the image in the designated electronic zoom area (see figures 8 – 11);

a light-emission control unit (Strobe Driving Circuit 37) for controlling a strobe light-emission device (Strobe 4); and

wherein the center point of the designated electronic zoom area being different from a center point of the image of the subject represented by the image data output from said image sensing device (see the distinction between the original image with electronic zoom center point a in figure 8 and the electronically zoomed image in figure 9 also with center point a and also see paragraph 0162).

While Kowno et al. teach illuminating an entire sensed image, which fully encompasses illuminating a part of the subject that corresponds to an image within the electronic zoom area in the entire sensed image and a recording control unit (CPU 39) for recording, on a recording medium (Memory Card 24), an image that has been captured by the image sensing device (CCD 20) after the image has been composed; **Kowno et al. do not specifically disclose** do not disclose (a) a light-emission control unit that is for controlling a strobe light-emission device in such a manner that the strobe light-emission device illuminates precisely a position of a subject that corresponds to a center point of the designated electronic zoom area and do not disclose (b) recording on the recording medium image data output from said image sensing device AND data indicating position of the electronic zoom area OR image data representing the image with the electronic zoom area

In regards to the light emitting angle (a), in analogous art, Okamura also disclose an image sensing apparatus and a method of operating thereof including designating a zoom feature. More specifically, Okamura teaches, as shown in figures 1 and 2 and as stated in columns 3 (lines 1 – 5, 34 – 45, and 62 – 67) and 4 (lines 1 – 20), an image sensing apparatus including a zoom switch (113) such that when the zoom switch (113) is operated, a zoom lens (102) is moved accordingly, wherein a flash control device (109), also included in the image sensing apparatus, controls an angle of illumination of the flash (110) to correspond to a zoomed sensed image. Moreover, Okamura “controls the illuminating angle of the flash device 110 according to the magnification varying information.” Therefore, Okamura provides said light control unit changing a light emitting angle of the strobe light-emission device based on the zoomed image, as claimed. The Examiner stresses since the test for obviousness is what the combined teachings of the references would have suggested to those of ordinary skill in the art, it is irrelevant whether or not the zooming performed by Okamura is an optical zoom or an electronic zoom.

At the time the invention was made it would have been obvious to one with ordinary skill in the art to have changed a light emitting angle of the strobe light-emission device based on the electronically magnified image, as suggested by Okamura, in the image sensing apparatus and corresponding method, disclosed by Kowno et al., for the advantage of “taking a shot of an object with an adequate amount of exposure” (see column 1, lines 20 – 22, of Okamura).

In regards to the recording (b), in analogous art, Miyawaki et al. also disclose an image sensing apparatus for sensing an image of a subject and a designating unit for designating an electronic zoom area in the image of the subject. More specifically, Miyawaki et al. teach, as shown in figures 11 – 13, an image sensing apparatus for sensing an image of a subject (101) and

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a designating unit (104) for designating an electronic zoom area in the image of the subject (see sequence in figure 12). Furthermore, Miyawaki et al. also teach, as shown in figure 14 and as stated in column 13 (lines 18 – 54), that an image corresponding to an image within the electronic zoom area (child image plane) and that the sensed image (total image plane) may be superimposed and recorded in a recording medium (103). Therefore, Miyawaki et al. provides recording on the recording medium (103) image data output from said image sensing device (total image plane) AND image data representing the image with the electronic zoom area (child image plane).

At the time the invention was made, it would have been obvious to one with ordinary skill in the art have recording on the recording medium image data output from said image sensing device and image data representing the image with the electronic zoom area, as taught by Miyawaki et al., in the image sensing apparatus, disclosed by Kowno et al., for the advantage of providing a user perspective on the accuracy of user instructed image composition (see column 14, lines 30 – 39, of Miyawaki et al.).

10. As for **Claim 4**, Kowno et al. disclose, as shown in figures 8 and 9, wherein the image comprises a marking that is displayed at a center point of the electronic zoom area (Marking “a”).

11. As for **Claim 5**, Kowno et al. disclose, as shown in figure 1, wherein said apparatus is a digital still camera.

12. As for **Claim 6**, Kowno et al. disclose, as stated in paragraph 185, wherein said designating unit is a zoom-area designating switch (15) of said digital still camera.

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13. As for **Claim 7**, Kowno et al. disclose, as stated in paragraphs 50 and 157, wherein the electronic zoom device electronically magnifies the image in the designated zoom area by changing a downsampling ratio (“thinning”).

14. **Claims 9 and 10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kowno et al. in view of Okamura.

The *Summary of Kowno et al.* above is fully incorporated into these rejections. Also, the above *Response* is fully incorporated into these rejections.

15. For **Claim 9**, Kowno et al. disclose an image sensing apparatus (1) and a method of operating thereof comprising:

an image sensing device (CCD 20) for sensing the image of a subject and outputting image data representing the image of the subject;

an electronic zoom device that designates (Touch Tablet 6A) an electronic zoom area (figures 8 and 9) in the image of the subject and electronically magnifies the image in the designated electronic zoom area (see figures 8 – 11);

a light-emission control unit (Strobe Driving Circuit 37) for controlling a strobe light-emission device (Strobe 4); and

wherein the center point of the designated electronic zoom area being different from a center point of the image of the subject represented by the image data output from said image sensing device (see the distinction between the original image with electronic zoom center point a in figure 8 and the electronically zoomed image in figure 9 also with center point a and also see paragraph 0162).

While Kowno et al. teach illuminating an entire sensed image, which fully encompasses illuminating a part of the subject that corresponds to an image within the electronic zoom area in the entire sensed image and a recording control unit (CPU 39) for recording, on a recording medium (Memory Card 24), an image that has been captured by the image sensing device (CCD 20) after the image has been composed; Kowno et al. do not specifically disclose do not disclose a light-emission control unit that is for controlling a strobe light-emission device in such a manner that the strobe light-emission device illuminates precisely a position of a subject that corresponds to a center point of the designated electronic zoom area.

In analogous art, Okamura also disclose an image sensing apparatus and a method of operating thereof including designating a zoom feature. More specifically, Okamura teaches, as shown in figures 1 and 2 and as stated in columns 3 (lines 1 – 5, 34 – 45, and 62 – 67) and 4 (lines 1 – 20), an image sensing apparatus including a zoom switch (113) such that when the zoom switch (113) is operated, a zoom lens (102) is moved accordingly, wherein a flash control device (109), also included in the image sensing apparatus, controls an angle of illumination of the flash (110) to correspond to a zoomed sensed image. Moreover, Okamura “controls the illuminating angle of the flash device 110 according to the magnification varying information.” Therefore, Okamura provides said light control unit changing a light emitting angle of the strobe light-emission device based on the zoomed image, as claimed. The Examiner stresses since the test for obviousness is what the combined teachings of the references would have suggested to those of ordinary skill in the art, it is irrelevant whether or not the zooming performed by Okamura is an optical zoom or an electronic zoom.

At the time the invention was made it would have been obvious to one with ordinary skill in the art to have changed a light emitting angle of the strobe light-emission device based on the electronically magnified image, as suggested by Okamura, in the image sensing apparatus and corresponding method, disclosed by Kowno et al., for the advantage of “taking a shot of an object with an adequate amount of exposure” (see column 1, lines 20 – 22, of Okamura).

16. As for **Claim 10**, Kowno et al. disclose, as stated in paragraphs 50 and 157, wherein the electronic zoom device electronically magnifies the image in the designated zoom area by changing a downsampling ratio (“thinning”).

Conclusion

17. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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18. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Justin P Misleh whose telephone number is 571.272.7313. The Examiner can normally be reached on Monday through Friday from 8:00 AM to 5:00 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Vivek Srivastava can be reached on 571.272.7304. The fax phone number for the organization where this application or proceeding is assigned is 571.273.3000.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JPM
July 22, 2006



VIVEK SRIVASTAVA
PRIMARY EXAMINER